

ABSTRACT OF THE DISCLOSURE

A perpendicular magnetic recording system is provided which eliminates unwanted side writing to adjacent recording tracks due to the skew angle effect. The system includes a perpendicular magnetic recording head with a write pole that is used to sequentially write to adjacent tracks of a magnetic recording disk. In one embodiment, the write pole is aligned at a compensation angle with respect to the recording tracks which remains greater than zero as the recording head travels in an arc across the disk. When the recording head moves radially inwardly or outwardly across the tracks of the disk, the compensation angle remains greater than zero. Any side writing by the write pole to adjacent tracks is eliminated as the write pole sequentially writes to the next adjacent track. By eliminating the skew angle effect, smaller spacings may be provided between adjacent tracks, thereby increasing data storage densities.

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